

**From:** [Young, Howard S.](#)  
**To:** [Sheldrake, Sean](#); [Zhen, Davis](#)  
**Cc:** [Humphrey, Alan](#); [Grossman, Scott](#); [Scott Coffey](#)  
**Subject:** RE: PH - SW sampling HASP addendum [DIVE] review- deliberative  
**Date:** Friday, March 30, 2018 3:23:45 PM

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Sean,

I am compiling the comments on the HASP addendum and had a couple of questions on your comments:

1. *THA inadequate. Examples were provided which included contaminated water diving aspects. All of these should be included and discussed during daily safety briefings. Are you referring to AECOM's Attachment 1 Pre-Job Hazard Assessment or Global's Section 6 table of Diving Emergency Procedures?*
6. Missing safety equipment: a backboard must be on the dive platform. *Global has a Stokes liter listed. Does that address this backboard comment?*

We will send this to you and the team later today.

Thanks

Howard

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**From:** Sheldrake, Sean [mailto:[sheldrake.sean@epa.gov](mailto:sheldrake.sean@epa.gov)]

**Sent:** Friday, March 30, 2018 9:43 AM

**To:** Coffey, Scott <[CoffeySE@cdmsmith.com](mailto:CoffeySE@cdmsmith.com)>; Zhen, Davis <[Zhen.Davis@epa.gov](mailto:Zhen.Davis@epa.gov)>; Young, Howard S. <[younghs@cdmsmith.com](mailto:younghs@cdmsmith.com)>

**Cc:** Humphrey, Alan <[Humphrey.Alan@epa.gov](mailto:Humphrey.Alan@epa.gov)>; Grossman, Scott <[grossman.scott@epa.gov](mailto:grossman.scott@epa.gov)>

**Subject:** FW: PH - SW sampling HASP addendum [DIVE] review- deliberative

Team ERT, let me know if I missed something –thanks Alan and Scott! Charge code is Portland harbor rd/ra o/s px..

Scott(coffey),

Good start, a few more changes needed before we can let them start sediment trap work with divers.

The diver must have a slick rubber or trilam suit capable of contaminated water diving (CWD) decon, (neoprene not allowed for gloves, suit or neck dam) along with a full face mask that sits directly on decon compatible hood (or helmet mating to the suit, or less ideal, a latex neck dam), and decon compatible gloves. Again, **neoprene neck dams will not be allowed on the project –they leak substantially and may not be used (I want pictures to show they used the right kind please).**

Couple of articles on that I've written with Alan:

<http://www.nxtbook.com/nxtbooks/naylor/ADCS0412/index.php?startid=22#/22>

<http://www.nxtbook.com/naylor/ADCS/ADCS0415/index.php#/0>

<http://psdiver.com/images/PSDiverMonthlyIssue95g-sm-Secure.pdf#page=6>

More articles: <https://www.epa.gov/diving/diving-publications>

Also see DSM, appendix Q, Decon: <https://www.epa.gov/diving/epas-diving-safety-program>

But mainly for these sites we're looking for thorough **potable** water decon (note I didn't say river water) which we've shown to be effective in removing sediment particles from appropriate PPE and better than 95% effective in removal of pathogens -- in the hot zone/swim step/drop bow.

Other comments.

1. Alpha flag must be 1meter x1meter per USCG colregs and displayed with a recreational flag while at anchor with surface supplied divers in water.

2. Emergency gas supply size for bailout must be specified (as Jason noted, 30 works) but this must be upgraded to 50 if planned depth exceeds 30 FSW/gauge depth.
3. Section 2.4 must specify emergency egress for an unconscious diver (davit? Crane?)
4. 5.1.2 is too vague. A specific means of primary call to EMS must be stated (e.g. EMS will be activated via a call on channel 16 (primary), with 911 as a backup via cell phone).
5. 5.2.1 is inadequate. The nearest chamber capable of treating an injured diver must be identified (e.g. providence). Seattle locations may be listed as a backup as time allows.
6. THA inadequate. Examples were provided which included contaminated water diving aspects. All of these should be included and discussed during daily safety briefings.
7. Figure 5 hazard zone figures are inadequate. A hazard zone figure must be included with decon discussion that includes all zones. If boat changeups are possible, include multiple figures. Acceptable figures are attached. EPA oversight will be stopping work if the zones are not adhered to (e.g. lunch in the CRZ or EZ, moving equipment thru zones without decon). Wind direction must be specified and configuration adjusted if the wind changes to avoid splashes outside of the EZ.
8. Training specified is inadequate. All divers must have taken 40 hour 1910.120 hazwoper to participate in these activities—please update HASP accordingly.
9. ADCI consensus standard reference shall be updated to the most current version (6.2)  
<https://www.adc-int.org/content.asp?contentid=173>
10. FSP excerpt must be provided for the dive brief for EPA review and included in the dive plan (the only part of the HASP the divers might have a chance of reading).. Global divers are not scientists and the dive plan/dive brief must be pre-reviewed by EPA to ensure that instructions will provide for minimum data quality needs.
11. Before initiating diving, include and provide a signature page to EPA o/s staff that all divers have read and understand the dive plan.
12. Missing safety equipment: a backboard must be on the dive platform.
13. Resubmit the plan with detailed information on diver dress, along with a decontamination section, and CWD THA aspects.

Let me know if we need a call. Since I'm sidelined by our OK boys, Scott G or Alan can school Global and/or AECOM on these issues as needed to ensure operations are safe and we get high quality data.

Thanks!

S

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<https://www.epa.gov/scientific-diving>

<https://www.facebook.com/EPADivers>

<https://www.epa.gov/superfund/portland-harbor>

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**From:** Coffey, Scott [<mailto:CoffeySE@cdmsmith.com>]

**Sent:** Thursday, March 29, 2018 4:38 PM

**To:** Sheldrake, Sean <[sheldrake.sean@epa.gov](mailto:sheldrake.sean@epa.gov)>; Zhen, Davis <[Zhen.Davis@epa.gov](mailto:Zhen.Davis@epa.gov)>

**Cc:** Young, Howard S. <[younghs@cdmsmith.com](mailto:younghs@cdmsmith.com)>; Silvertooth, Jason R. <[silvertoothjr@cdmsmith.com](mailto:silvertoothjr@cdmsmith.com)>

**Subject:** FW: PH - SW sampling HASP addendum review

Sean.

Attached are our comments on the Sediment Trap HASP Addendum. We just inserted our comments directly on the HASP Addendum, but the Excel file provides a summary of the bubble comments.

Let us know if you have any questions and feel free to add to our list.

Scott